

# The Groundplane



Join SBARA members for a pre-meeting social dinner at Sweet Tomatoes.

Time: 6:00PM — Date: August 12th. — Address: Gateway Plaza - Corner of Paseo Padre and Walnut

## President's Message — By Al Rendon WT6K

It is hard to believe that we are well into the last half of the 2005 SBARA calendar year. The time has gone so fast it is mind-boggling. At this point in the year I've spoken with many of the leadership team members regarding their plans for next year. It is apparent that some of the team will be continuing and some will be stepping down, still being involved with SBARA activities but not in a leadership role. It is never too early to start planting the seed for others to step up and experience the joys of being in a leadership role. The word that comes to mind is continuity. Without the passing of the baton from one team to another, a leadership vacuum is created and the organization suffers. The last thing I want to see is all the building we've accomplished in

the last two years dissolve away. All that the leadership positions require is a desire to be part of the good things that are taking place and help with whatever 'gifts' you have to offer. We work as a team with each person doing their part. It is a rewarding experience. It is heart warming to see the membership show their appreciation of the programs and activities that we have developed and presented. Think about joining us next year. Give a little back to SBARA for what it has provided to you and the Tri Cities amateur radio community at large.

Today I read in the ARRL Newsletter that the FCC has finally decided to eliminate the Morse code requirements for all license classes. This will have a profound impact on all of you no-code Techni-

cian class amateurs. You will immediately have some HF privileges and upgrading to a General or Extra class for expanded HF privileges will only require passing a written examination. So get ready to get on the HF bands!

We are planning a SBARA Spaghetti Dinner for the October meeting at the Veteran's Hall. It will be a social night for all the family with no SBARA meeting or presentation. It should be lots of fun. Please plan to attend with the spouse and children. (cont'd. on page 2)

### August Program

At this month's meeting SBARA will be having it's traditional yearly "Home Brew Night".



(cont'd. on page 2)

August 2005  
Volume 6 Issue 8

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### Special points of interest:

- Zucchini Festival
- Funny Noises
- FCC CW Proposal

## Operational and Event News

| DATE                     | TIME    | DESCRIPTION                                                               |
|--------------------------|---------|---------------------------------------------------------------------------|
| August 6 <sup>th</sup>   | 5:00PM  | Fremont T-Hunt - <a href="http://www.T-Hunt.com">www.T-Hunt.com</a>       |
| August 12 <sup>th</sup>  | 6:00PM  | SBARA Pre-Meeting dinner at Sweet Tomatoes                                |
| August 12 <sup>th</sup>  | 7:30PM  | SBARA Meeting - Yaesu FT-2800M 65 W - 2M FM Transceiver                   |
| August 20 <sup>th</sup>  | All Day | Hayward Zucchini Festival - SBARA Fundraiser - Please come!               |
| August 21 <sup>st</sup>  | All Day | Hayward Zucchini Festival - SBARA Fundraiser - Please come!               |
| August 27 <sup>th</sup>  | 8:00PM  | Work KU6S - 80 Meters - Frequency : 3900KHz - tune +- 10KHz if Freq Busy! |
| September 3              | 5:00PM  | Fremont T-Hunt - <a href="http://www.T-Hunt.com">www.T-Hunt.com</a>       |
| September 9              | 7:30PM  | SBARA Meeting                                                             |
| October 14 <sup>th</sup> | 6:00PM  | SBARA Family Spaghetti Dinner Fundraiser - Everyone Come!                 |

### Presidents Message (cont'd.)

We are looking for a big turnout like we had at last year's December Holiday dinner. The menu will include a wonderful tossed green salad and garlic bread to complement the spaghetti. Jim Wood will be our cook and I can tell you from personal experience that his food is delicious. Price will be around \$10 for adults and \$5 for children under 12 years old. Mark you calendar for October 14<sup>th</sup>, 6:00PM at the Veterans Building in Niles. Buy your ticket at the August meeting or by contacting Al Rendon [wt6k@arrl.net](mailto:wt6k@arrl.net) (510) 656-2427.

Finally, I've sent out request for SBARA members to join in this years communication support for the Hayward Zucchini Festival. Those of you that participated last year know how much fun it is. Please consider doing it again this year or joining for the first time if you haven't before. This is a SBARA fundraiser since we do not use amateur radio frequency so your attendance will generate income for our organization. To sign-up e-mail me at [wt6k@arrl.net](mailto:wt6k@arrl.net)

Hope to hear you on the air this month.

73,

Al Rendon -WT6K

### Meeting Program (cont'd.)

This is a fun activity where everyone is encouraged to bring some home made item, no matter how small, to display and describe if they desire. Please take the time to look around your 'shack' and find those projects that you have made to enhance the enjoyment of your amateur radio interests. To make this a success please make an effort to find

something to bring... then be sure to attend the August meeting to enjoy the fun. Oh yes, Gene has a super raffle planned for after the home brew items are all described. See his raffle announcement in this issue for details.

73,

Al Rendon -WT6K

## SBARA Name Badges — By Jim Woods — KE6IVA

If you want to order a name badge see Jim Wood at the next meeting. They are \$10.00 each.

All New Members get a name badge free when they join SBARA. Family Memberships get one free badge and have to order badges for the rest of the family from Jim Wood at \$10.00 each.

Regular Members who do not have their name badge should join the majority and order one.

Wear your badge to the meetings and all events so others will know who you are. Get two and keep one in the car in case you leave yours home on the dresser.

Members have ordered their badges and never picked them up from me.

Come to the next meeting and get yours.

I have the following badges and will bring them to the next meeting:

|                         |                     |
|-------------------------|---------------------|
| KG6MBM Margaret Edgelow | KF6YRC Edwin Nuguid |
| W6PKS Bud Pearson       | KD6AVE Tony         |
| KG6HJU Steve Wilson     | KD6ISO Louise       |
| KF6OMK Ron Green        | W6BK Ken            |
| AD6MG Brian Krause      | Kaethe Langs        |

Please come to the next meeting August 12<sup>th</sup> and pick up your badge.

Thanks, Jim — KE6IVA

Have you ever volunteered to help at the Hayward Zucchini Festival? It is a worthwhile event to support while having lots of fun. Radios are provided all you have to do is sign-up and attend on your designated shift. Come to the August SBARA meeting and sign up for a shift or two or e-mail Al Rendon [wt6k@arrl.net](mailto:wt6k@arrl.net) with the day(s) and shift(s) you want to work. For both Saturday and Sunday the shifts are:

Shift A - 6:00AM to 11:30AM

Shift B - 9:30AM to 2:15PM

Shift C - 11:00AM to 4:00PM

Shift D - 3:30PM to 7:30PM

Shift E - 2:30PM to 7:30PM

### Zucchini Festival — 2005



## August Raffle News — By Gene Arrillaga — KG6ZYD

The August raffle features 65 watts of FM power in a Yaesu mobile transceiver. The FT-2800M has four power ranges, 221 memory channels with alpha-numeric display plus a special 10-channel weather band memory bank and direct keypad frequency entry from the microphone. Full details available at <http://www.yaesu.com/> . Of course, we will have some additional prizes.

SBARA would like to thank HRO Sunnyvale for their generous help in obtaining raffle prizes.



### Ham Radio

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| T | A | N | R | H | I | A | N | S | D | Y | D | B | E | U | D | F | I |
| T | E | R | T | U | O | O | T | A | H | E | R | T | Z | A | O | O | K |
| R | L | A | C | E | T | G | L | L | N | T | S | D | A | C | I | N | H |
| C | U | E | A | T | N | H | C | C | O | D | S | O | T | I | E | E | T |
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| B | D | E | M | P | W | C | A | P | A | C | I | T | O | P | L | H | A |

### How to Solve

The word search below is not an easy one to solve. First, the words to the search are not shown on this page. Second, the words are arranged in eight different directions, up-and-down, left-and-right, and diagonally both forward and backward. There are 28 ham radio related words in this word search, try to pick out as many words as you can!

### List of Words

AMPS, ANTENNA, ARRL, CAPACITOR, COLLINS, CURRENT, EXTRA CLASS, GMT, HAM, HEATHKIT, HERTZ, LINEAR, MEGACYCLE, MOBILE, MORSE CODE, NEWINGTON, NICAD, OHMS, OSCAR, QRZ, RESISTOR, SINE WAVE, SSB, TUBE, VOLTAGE, WPM.

## HF Rig Mysteries — By Mike — K6EEP

There are many knobs, switches, and connectors on HF rigs. And not everyone knows what they are all for. So I will try to explain the ones I can think of offhand. If anyone has questions about a particular one on their rig just send me an email and I will help to decipher it.

AGC stands for automatic gain control. It is only used on receive. It helps protect the receiver from very loud signals. There are usually speeds associated with it like fast and slow. Fast is more useful on CW and slow is usually better on voice. AGC actually reduces the gain of your receiver in the presence of loud signals. It makes them sound cleaner. The speed is how fast the receiver is returned to it's normal gain setting. So on rapidly changing signals like CW a fast setting allows you to hear the CW and not cut off the next character.

ALC stands for Automatic Level Control. It is only used on transmit. And mostly for voice. It is a small voltage that exits the radio via a connector usually on the back of the rig. It connects to power amplifiers so voice signals will not splatter. It makes your voice sound better and keeps your transmitted bandwidth down.

RIT, XIT, Clarifiers. These all do the same things. RIT is receiver incremental tuning. XIT is transmitter incremental tuning. Once you have selected your frequency to operate you may notice the other station drifting off frequency. You may activate the RIT to tune them back in. But you have not moved your transmit frequency! To do that as well you need to use the XIT. A Clarifier is a silly CB radio term that Yaesu still insists on using on ham radios. It is just a plain old RIT/XIT.

NB is a noise blanker. It is supposed to reduce impulse noise like that from a car's ignition system. It is usually an on/off switch but some rigs have a couple different settings. Usually this affects the speed of the noise it eliminates. In 99% of the radios I have ever used it never did anything useful. But every once in a great while it does help.

ATT is attenuation or attenuator. Set it to zero if you want to hear people. It is not used very often. But you can make loud signals quieter if you turn it on.

There are many new DSP (digital signal processors) in rigs these days. They have all kinds of new names for the filtering they do. It can be as simple as NR (noise reduction) or as obscure as Yaesu's VRF. Most of the strange acronyms not listed here end up being some sort of audio filtering. Consult your user manual for details.

For tube fans... To tune up a tube transmitter or amplifier, peak the grid current, and dip the plate current.

Well that's a few of the more common ones. I hope it helps explain them a bit for you.

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Looking for a Free Antenna & Tower?

Contact Al—WT6K





## Funny Noises — By — Marshall G. Emm N1FN/VK5FN

Amateur Radio administrative bodies, and the "industry" in general, have been concerned for some time about the apparent decline in the number of licensees in this country. To make one part of this story really short, there was a consensus that the Morse Code requirement was a barrier to entry, and that numbers would increase if it were easier to get a license. As so often happens, the bureaucrats, politicians, and merchants jumped to a conclusion based on erroneous suppositions.

### **Consider:**

Getting an amateur radio license is not difficult or expensive. The license costs nothing, and the exam questions can be memorized if one doesn't care to actually learn the material. There are approximately 700 thousand amateur radio operators in this country, and the number is declining.

Getting a private pilot's license is difficult and it is very expensive. Examination and certification fees run into the hundreds of dollars, and the prospective pilot will spend on average of 5 to 7 thousand dollars on instruction, which requires considerable effort over a period of 6 to 18 months. There are approximately 1.2 MILLION private pilots in this country, and the number is growing.

### **Conclusion?**

If people really want to do something, they will devote the necessary time, money, and effort to it. If people are dropping out of amateur radio, and newcomers are not coming in, there must be some reason other than "barriers to entry." If the barriers are not the problem, removing or reducing them is not the solution. That was easy, wasn't it? Just a few numbers to illustrate what common sense should already have told you. Why isn't it so obvious to the "administrators?"

The first problem is that bureaucracies tend to focus on numbers. They get the number of licensed hams (and a couple other "key statistics") from the FCC and infer a decline, which may or may not have any real meaning.

Unfortunately the numbers that are available from the FCC database don't really tell us very much. The critical number should be the number of ACTIVE hams, and there is simply no way to measure that. When the database included dates of birth, it was possible to see that the average age of hams is increasing, but what does that really mean?

It is possible to assume that children aren't coming into the hobby at the rate they did a couple decades ago, but it is unwise to assume that that's where the problem is, and that we need to expend an enormous amount of effort to try to attract kids to the hobby.

It would be just as useful (if not more so) to conclude that mature age entrants are the bulk of the newbies, and therefore our recruiting efforts should be focused there, where it's apparently an easier sell! A fundamental principle of business is that you can't make decisions based on the numbers unless you are confident that they are accurate, and you know what they mean.

We can only guess at the real meaning of some of the available license statistics. Those who make decisions based on them can be wildly wrong, but there's no way to argue with them. How many came into the hobby as no-code Techs, for the simple reason that a license gave them access to 2M repeaters and autopatch? How many have let the license expire because they now have cell phones?

## Funny Noises (cont'd) — By — Marshall G. Emm N1FN/VK5FN

I tend to be a little skeptical whenever someone tells me the sky is falling. If someone tells me that license numbers are dropping, and we have to go out of our way to recruit more hams to the hobby, I want to know why one follows from the other. Where are the numbers that prove that we "need" more hams? What is the right size for the amateur radio population? Personally, if I can find somebody to talk to I'm happy, and couldn't care less if the rest of the band is empty.

And any time it takes me more than five minutes to find an empty frequency, I'll complain that there are too many hams out there! In looking at the reasons for insisting on continued growth, I like to ask one of the fundamental questions from Criminology 101- who benefits? The publisher of an amateur radio magazine will benefit. The manufacturer of mass produced transceivers and related equipment will benefit. The people whose job it is to "administer" some small part of the hobby will benefit. The active ham radio operator, who is the real heart of the hobby, probably will not benefit. The hobby as a whole will not be better off if large numbers of newbies are dragged in for all the wrong reasons. It's probably fair to say that all human activities tend to generate bureaucracies. And we know that bureaucracies develop their own corporate cultures and are driven to perpetuate themselves. Too often they lose track of their roots, and try to become their own reasons for being. This is just a fact of life in the 21 century, and it will happen with any organization, be it a university, a church, a government department, or an amateur radio club. But a hobby is just that- something that people like to do, because it is fun and somehow rewarding to them. The future of the hobby is in the hands of those who practice it, not those who administer it. With that in mind, I think

I'll turn the computer off and go see what's happening on 20!!!

[First published in "The Low Down" June 2002]

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**FCC Proposes to Drop Morse Code Requirement for All License Classes** (Jul 20, 2005) -- The FCC has proposed dropping the 5 WPM Morse code element as a requirement to obtain an Amateur Radio license of any class. The Commission recommended the change to its Part 97 Amateur Service rules in a *Notice of Proposed Rule Making (NPRM)* in WT Docket 05-235. Any rule changes proposed in the *NPRM* would *not* become final until the FCC gathers additional public comments, formally adopts any changes to its rules and concludes the proceeding by issuing a *Report and Order (R&O)* spelling out the changes and specifying an effective date. That's not likely to happen for several months. The FCC declined in its *NPRM* to go forward with any other suggested changes to Amateur Service licensing rules or operating privileges beyond elimination of the Morse requirement.

### DRIVE TIME

What do you do during the time you are traveling to and from work? Do you comb your hair, shave, eat, drink or (heaven forbid) talk on the cell phone? Perhaps you should try something much safer and a lot more fun. I've always found ham radio conversations enjoyable when I'm riding in a car. Whether I'm a casual listener or a full participant, those conversations are stimulating and they keep me alert. All you have to do is lock your frequency to 147.015. You'll find it more convenient while driving than say sleeping, or trying to pick a fight with the guy that just cut you off. Give ham radio a try next time you're on the road.

Catch you on the air!!

Bill....WB9YVM

## Handy Web Links

|                       |                                                                                                 |
|-----------------------|-------------------------------------------------------------------------------------------------|
| <b>SBARA Web Site</b> | <a href="http://www.qsl.net/sbara">http://www.qsl.net/sbara</a>                                 |
| ARRL Main Site        | <a href="http://www.arrl.org/">http://www.arrl.org/</a>                                         |
| ARRL SCV Division     | <a href="http://www.arrl.org/sections/SCV.html">http://www.arrl.org/sections/SCV.html</a>       |
| ARRL East Bay Section | <a href="http://www.pdarrl.org/ebsec/index.html">http://www.pdarrl.org/ebsec/index.html</a>     |
| ARRL Contest Page     | <a href="http://www.arrl.org/contests">http://www.arrl.org/contests</a>                         |
| Contest Calendar      | <a href="http://www.hornucopia.com/contestcal">http://www.hornucopia.com/contestcal</a>         |
| Callsign Lookup (QRZ) | <a href="http://www.qrz.com/">http://www.qrz.com/</a>                                           |
| Vanity Callsign Info  | <a href="http://www.vanityhq.com/">http://www.vanityhq.com/</a>                                 |
| IRLP Main Page        | <a href="http://www.irlp.net/">http://www.irlp.net/</a>                                         |
| AMSAT                 | <a href="http://www.amsat.org/">http://www.amsat.org/</a>                                       |
| FCC Services          | <a href="http://wireless.fcc.gov/services/amateur">http://wireless.fcc.gov/services/amateur</a> |

### SBARA on the Internet at

<http://www.qsl.net/sbara>

**On the Air at 147.015 + PL 103.5**

### Fremont Repeaters & Net Information

WA6PWW - 147.015 +600Khz, PL 103.5

WA6PWW - 223.900 -500Khz, PL 107.2

WA6PWW - 442.600 +5Mhz, PL 107.2

N6OXR - 146.94 -600Khz, PL 123.0

N6OXR - 441.525 +5Mhz, PL 123.0

ARES - Tuesday @ 7:30pm - 147.015 + PL 103.5

### *Groundplane SBARA Newsletter Copyright 2005 SBARA*

*The Groundplane is published monthly by the South Bay Amateur Radio Association. Articles and letters are always welcome. The normal deadline for material is six days prior to the end of the previous month. Articles can be sent by email to [hamradio@comcast.net](mailto:hamradio@comcast.net) or via U.S. Mail. Contact the Editor for details and submission guidelines. The opinions expressed in the Groundplane are strictly those of the authors.*

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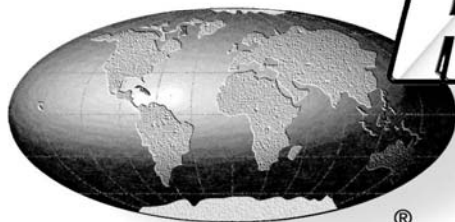
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- 100W HF/6M, 50W/2M, 20W/440 MHz
- AF-DSP • Plug and Play Filters - No Soldering
- Easy-to-Navigate menus

**Low Pricing!**



**IC-756 PRO III** All mode Transceiver

- 160-6M @ 100W • Enhanced Rx performance
- 32 bit IF DSP • SSB/CW Synchronous tuning
- Enhanced 5 inch color TFT w/spectrum scope
- Selectable IF filter shapes for SSB & CW
- Multiple DSP controlled AGC loops
- Advanced CW functions
- 101 alphanumeric memories

**The Ultimate Radio!**



**DJ-196T** 2M/HT

- 5 Watt out
- 40 memories
- Alphanumeric display
- CTCSS • DCS built in
- "S" meter
- Auto Dialer

**Low Pricing!**



**DR-135TP** 2M mobile

- 50 Watt out • Alpha numeric display
- 100 mems • Built-in TNC 1200 & 9600 Baud
- Front Panel GPS in • Rear DB-9 port
- CTCSS/DCS Encode/Decode built in

**Low Pricing!**



**VX-7R**

- 50/2M/220/440 HT
- Wideband RX
- 900 Memories
- 5W TX (300mw 220MHz)
- Li-Ion Battery
- Fully Submersible to 3 ft.
- Built-in CTCSS/DCS
- Internet WIRESS compatible

**Great Price!**



**FT-857D**

- Ultra compact HF, VHF, UHF
- 100w HF/6M, 50w 2M, 20w UHF
- DSP included • 32 color display
- 200 mems • Detachable front panel (YSK-857 required)

**Call for Low Price!**



**FT-1000MP MKV** HF Trans.

- Enhanced Digital Signal Processing
- Dual RX
- Collins SSB filter built-in
- 200W, External power supply

**Low Pricing!**

# The Ground Plane



SBARA monthly meeting:  
August 12th, 2005  
at the Veterans Hall in the  
Niles District  
Meeting Details in this Issue

At 6:00PM prior to the August 12th  
SBARA meeting we will be dining at  
Sweet Tomatoes. Join your fellow  
SBARA members for a social meal.

## FCC Proposes to Drop Morse Code Requirement — Details Inside

The Ground Plane—KU6S  
<http://www.qsl.net/sbara>  
South Bay Amateur Radio Association — SBARA  
P.O. Box 8377  
Fremont, Ca. 94537-8377